I-ACTS

Ontario
Ministry of the Environment
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PUBLICATION CODE: RFS1-1/79

ABOUT RESOURCE RECOVERY

MARKETING -- THE KEY TO SUCCESS IN RESOURCE RECOVERY

When he wasn't busy writing his Canterbury Tales, Geoffrey Chaucer was collecting scrap metal as clerk of works for Westminister Palace.

When the infamous pirate Captain Kidd was captured in 1699, he was hauling a cargo of ten tons of scrap iron for colonial iron works.

Paul Revere, a silversmith as well as an early freedom rider, constantly advertised in the colonial press for scrap metal.

The pioneers of recycling, whether they were unknown, famous, or infamous, all had a common goal -- to make money from the sale of used materials.

Determination is not enough:

In Ontario, the Ministry of the Environment has launched an intensive program of waste and reclamation research, with a new laboratory for practical waste recovery study -- The Experimental Plant for Resource Recovery. The provincial program will assist in the development of reclamation plants across the Province.

In this comprehensive program, and in the many recycling programs started over the years by citizen groups and municipalities, the key to success has not changed since Chaucer's day.

Success in any recycling or reclamation program depends on the sale of the reclaimed materials. Without a market, there can be no recycling.

Furthermore, the collection of waste and the use of land and facilities, and the handling, processing, and transportation of waste for the recycling cost money. Some of the costs can be covered by volunteer labor in small-scale operations, but in the final analysis, the survival of the reclamation program depends on the recovery of these costs by marketing.

One of the functions of the Experimental Plant for Resource Recovery is to develop and prove markets for recovered materials. Ministry's studies indicate that flexibility is essential in this development so that products can be directed to a number of markets to achieve the best price for each of them.

However, the products obtained through resource recovery must not merely displace existing materials already being recycled. Present markets must be expanded and new uses and markets for recovered materials have to be found. This means that resource recovery will complement and expand the present role of the secondary materials industry.

Some of the existing and potential markets for reclaimed materials are:

Corrugated Cardboard:

This can be collected readily in a depot operation or in commercial pickups. Present prices range up to $50 per ton and the current steady demand could rise if major users increase their capacity for processing.

Newsprint Waste:

A number of markets exist for bundled or shredded newsprint within the paper and other industries. The price wastepaper dealers pay depends entirely on the market demand for this material; unfortunately, this demand fluctuates a great deal. Insulation manufacturers now use 6,000 tons a year but the potential future use is much greater.

A relatively new market is offered in agricultural bedding production, with a current use of 2,500 tons of shredded paper a year. Straw, sawdust, and corn cobs, now extensively used in this market, are getting expensive and are in short supply. Agricultural bedding can, in turn, be used as a soil conditioner and fertilizer with some nutrient value.

Air Separated Combustibles:

About 40 per cent of the garbage processed in a front-end resource recovery plant consists of combustibles suitable for use as a fuel. There are a number of potential markets for this fuel.

Cement industry representatives and the Ministry co-operate in a demonstration project involving the use of fiber fuel from resource recovery in a full-scale cement kiln operation.

The shredded refuse fuel fraction may also be useful in promoting sludge dewatering and in adding heat value for incineration in some areas. The high paper content would reduce moisture and allow self-sustaining combustion. One Ontario municipality, for example, spends more than $200,000 a year for natural gas for firing roasters in sludge processing. Refuse-derived fuel could replace this gas.

Ferrous Metal:

It has been claimed that Canada is short about 1,000,000 tons of ferrous scrap every year. Steel reclaimed from all municipal waste in Ontario could reduce this shortage by about 375,000 tons per year.

The Ministry is exploring and developing markets for ferrous metals in de-tinning plants, iron foundries, the basic steel industry, and steel foundries.

Glass:

The glass industry in Ontario has maintained a steady market for glass from municipal and private recycling operations with prices, delivered at the plant, ranging from $10/ton for mixed glass to $20/ton for glass sorted as to color.

The Ministry and the industry will evaluate the marketing potential of a glass fraction separated in Resource Recovery. Other potential uses for this glass fraction include bulk applications for production of various building materials.

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